IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

CALABRIA ET AL.

Confirmation No. 7681

Application No.: 10/743,520

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Title: SERVER-BASED KEYWORD ADVERTISEMENT MANAGEMENT

BRIEF ON APPEAL

Appeal from Group 3622

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I. REAL PARTY IN INTEREST

The real party in interest for this appeal and the present application is Palo Alto Research Center Inc., by way of an Assignment recorded in the U.S. Patent and Trademark Office at Reel 014847, Frame 0646.

II. RELATED APPEALS AND INTERFERENCES

The following are identified as prior or pending appeals, interferences or judicial proceedings, known to Appellant, Appellant's representative, or the Assignee, that may be related to, or which will directly affect or be directly affected by or have a bearing upon the Board's decision in the pending appeal: i) Appeal No. 2011-001050, Serial No. 10/741,336, received from the Technology Center at the Board on October 25, 2010.

III. STATUS OF CLAIMS

Claims 1-21, 23-52, and 55-60 are on appeal.

Claims 1-21, 23-52, and 55-60 are pending.

Claims 1-21, 23-52, and 55-60 are rejected.

Claims 22, 53, and 54 are canceled.

IV. STATUS OF AMENDMENTS

No response or amendment to the pending Final Office Action was filed prior to the Notice of Appeal.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Claims 1-21, 23-30, 55, 56, and 58-60

Independent claim 1 is directed to a server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement (see ¶ 35, 42, 109-110; FIGS. 1,2). The method includes:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists (see ¶ 52, 121; FIG. 2);

b) selecting an initial plurality of candidate keywords (see ¶ 52, 121; FIG. 2);

c) expanding the initial plurality of candidate keywords selected in b) based at least in part on the at least one candidate advertisement selected in a) to form an expanded plurality of candidate keywords (see ¶ 54, 122, 123, 141; FIG. 2);

d) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from c) (see ¶ 42, 82; FIG. 2);

e) estimating a click-through rate for each advertisement-keyword pair created in d) (see ¶ 71);

f) calculating a return on advertising investment (ROAI) for each advertisement-keyword pair created in d) based at least in part on the corresponding click-through rate estimated in e) (see ¶ 52, 70; FIG. 2);

g) calculating an optimized bid for each advertisement-keyword pair created in d) based at least in part on the corresponding ROAI calculated in f) (see ¶ 42, 78-80, 119; FIG. 2); and

h) automatically submitting the optimized bids for each advertisement-keyword pair calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c) (see ¶ 42, 110, 113-114; FIG. 2).

Claim 6 depends from claim 1 and is directed to a combination in which at least one of the initial plurality of candidate keywords and the expanded plurality of candidate

keywords is automatically generated based at least in part from content of the at least one candidate advertisement (see ¶ 54, 123; FIG. 2).

Claim 8 depends from claim 1 and is directed to a combination in which the click-through rate for each advertisement-keyword pair is estimated by placing the corresponding candidate advertisement in a search results list on a trial basis (see ¶ 136, 143).

Claim 9 depends from claim 1 and is directed to a combination in which the click-through rate for each advertisement-keyword pair is estimated based at least in part on the relevance of content in the corresponding candidate advertisement to the one or more candidate keywords for the corresponding advertisement-keyword pair (see ¶ 129).

Claim 20 depends from claim 11 which in turn depends from claim 1. Claim 20 is directed to a combination in which the ROAI calculating in f) further includes considering an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser (see ¶ 54, 71; FIG. 2).

Claim 25 depends from claim 24 which in turn depends from claim 23 which in turn depends from claim 1. Claim 25 is directed to a combination in which the set of bid combinations is sorted by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order (see ¶ 68-69).

Claim 59 depends from claim 1 and is directed to a combination that also includes performing a competition assessment in which a competition assessment agent collects and analyzes information from at least one competitor's website to select one or more competitor keywords, wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is based at least in part on the competitor keywords from the competition assessment (see ¶ 56-57; FIG. 3).

Claim 60 depends from claim 59 which in turn depends from claim 1. Claim 60 is directed to a combination that also includes calculating a competitor ROAI for each competitor keyword based at least in part on the competition assessment, wherein the optimized bids calculated in g) are based at least in part on competitor ROAIs for competitor keywords related to the one or more candidate keywords for advertisement-keyword pairs for corresponding optimized bids (see ¶ 56-57; FIG. 3).

B. Claims 31-39

Independent claim 31 is directed to a server-based apparatus for submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement (see ¶ 35, 42, 109-110; FIGS. 1-3, item 14). The apparatus includes:

an advertisement selection system for selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists (see ¶ 52, 121; FIGS. 1-3, item 54);

a keyword selection system in communication with the advertisement selection system for selecting an initial plurality of candidate keywords and for expanding the initial plurality of candidate keywords based at least in part on the at least one candidate advertisement selected by the advertisement selection system to form an expanded plurality of candidate keywords (see ¶ 52, 54, 121, 122, 123, 141; FIGS. 1-3, item 52);

an advertisement-keyword selection system in communication with the advertisement selection system and keyword selection system for creating an advertisement-keyword pair for each candidate advertisement selected by the advertisement selection system and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from expansion of the initial plurality of candidate keywords by the keyword selection system, for estimating a click-through rate for each advertisement-keyword pair, and for calculating a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part on the corresponding estimated click-through rate (see ¶ 42, 52, 70, 71, 82; FIGs. 1-3, items 50, 56,); and

a bid determination system in communication with the advertisement-keyword selection system for calculating an optimized bid for each advertisement-keyword pair

created by the advertisement-keyword selection system based at least in part on the corresponding ROAI calculated by the advertisement-keyword selection system and for automatically submitting the optimized bids for each advertisement-keyword pair to the competitive bidding process for placement of each candidate advertisement selected by the advertisement selection system in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of keywords resulting from expansion of the initial plurality of candidate keywords by the keyword selection system (see ¶ 42, 78-80, 110, 113, 114, 119; FIGS. 1-3, item 50).

Claim 36 depends from claim 33 which depends from claim 31. Claim 36 is directed to a combination in which the ROAI agent also considers an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser (see ¶ 54, 71; FIG. 2).

Claim 39 depends from claim 38 which in turn depends from claim 37 which in turn depends from claim 31. Claim 39 is directed to a combination in which the bid determination system sorts the optimal set of bid combinations by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order (see ¶ 68-69).

C. Claims 40 and 41

Independent claim 40 is directed to a server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement (see ¶ 35, 42, 109-110; FIGS. 1, 2). The method includes:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in at least one publisher web page (see ¶ 52, 82, 121; FIG. 2);

b) selecting a plurality of candidate publisher web pages, wherein each candidate publisher web page is associated with one or more candidate advertisement selected in

a) and includes one or more auctioned advertisement positions (see ¶ 52, 82, 121; FIG. 2);

c) creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b) (see ¶ 42, 82; FIG. 2);

d) estimating a click-through rate for each advertisement-publisher web page pair created in c) (see ¶ 71, 82);

e) calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair created in c) based at least in part on the corresponding click-through rate estimated in d) (see ¶ 52, 70, 82; FIG. 2);

f) calculating an optimized bid for each advertisement-publisher web page pair created in c) based at least in part on the corresponding ROAI calculated in e) (see ¶ 42, 78-80, 82, 119; FIG. 2); and

g) automatically submitting the optimized bids for each advertisement-publisher web page pair calculated in f) to the competitive bidding process for placement of each candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b) (see ¶ 42, 82, 110, 113-114; FIG. 2).

D. Claims 42-52

Independent claim 42 is directed to a server-based method of submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement (see ¶ 35, 42, 109-110; FIGS. 1, 2). The method includes:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists (see ¶ 52, 121; FIG. 2);

b) selecting one or more keywords based at least in part on content of the at least one candidate advertisement selected in a) to optimize the keyword selecting and provide one or more optimized keywords (see ¶ 52, 54, 121-123, 141; FIG. 2);

c) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b), wherein each advertisement-keyword pair includes one or more optimized keywords (see ¶ 42, 82; FIG. 2);

d) calculating an optimized bid for each advertisement-keyword pair created in c) based at least in part on the one or more optimized keywords selected in b) (see ¶ 42, FIG. 2, 78-80, 119); and

e) automatically submitting the optimized bids for each advertisement-keyword pair calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords selected in b) (see ¶ 42, 110, 113-114; FIG. 2).

Claim 44 depends from claim 42 and is directed to a combination in which the at least one candidate advertisement selected in a) is based at least in part on information from the advertiser and matching content of each candidate advertisement to one or more candidate keywords, wherein the matching of content is at least partially automated (see ¶ 54; FIG. 2).

Claim 50 depends from claim 42 and is directed to a combination that also includes collecting information from a bidding service provider associated with the search results list, wherein the bidding service provider information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the bidding service provider information is considered in calculating the optimized bids in d) (see ¶ 121).

Claim 52 depends from claim 42 and is directed to a combination that also includes collecting information from a competitor web site associated with a competitor in relation to the advertiser, wherein the competitor web site information is considered in calculating the optimized bids in d) (see ¶ 56; FIG. 3).

E. Claim 57

Independent claim 57 is directed to a server-based computer program for use with an apparatus for submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement (see ¶ 35, 42, 109-110; FIGS. 1, 2). The computer program includes:

a non-transitory computer-readable storage medium having the computer program embodied in the storage medium for causing the apparatus to perform the following (see ¶ 35, 109-110; FIG. 1):

i) selection of at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists (see ¶ 52, 121; FIG. 2);

ii) selection of an initial plurality of candidate keywords (see ¶ 52, 121; FIG. 2);

iii) expansion of the initial plurality of candidate keywords selected in ii) based at least in part on the at least one candidate advertisement selected in i) to form an expanded plurality of candidate keywords (see ¶ 54, 122, 123, 141; FIG. 2);

iv) creation of an advertisement-keyword pair for each candidate advertisement selected in i) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from iii) (see ¶ 42, 82; FIG. 2);

v) determination of an optimized bid for each advertisement-keyword pair created in iv) (see ¶ 42, 78-80, 119; FIG. 2); and

vi) automatic submission of the optimized bids for each advertisement-keyword pair determined in v) to the competitive bidding process for placement of each candidate advertisement selected in i) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from iii) (see ¶ 42, 110, 113-114; FIG. 2).

VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

The following grounds of rejection are presented for review:

1) Whether claim 1 is properly rejected under 35 U.S.C. § 101 for allegedly being directed to a non-statutory process.

2) Whether claim 40 is properly rejected under 35 U.S.C. § 101 for allegedly being directed to a non-statutory process.

3) Whether claim 42 is properly rejected under 35 U.S.C. § 101 for allegedly being directed to a non-statutory process.

4) Whether claim 31 is properly rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter.

5) Whether claim 40 is properly rejected under 35 U.S.C. § 102(e) for allegedly being anticipated by U.S. Patent Publication No. 2003/0105677 to Skinner.

6) Whether claim 1 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of U.S. Patent Publication No. 2003/0055816 to Paine et al.

7) Whether claim 6 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

8) Whether claim 8 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

9) Whether claim 9 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

10) Whether claim 20 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

11) Whether claim 25 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

12) Whether claim 59 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

13) Whether claim 57 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

14) Whether claim 31 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

15) Whether claim 36 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

16) Whether claim 39 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

17) Whether claim 42 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

18) Whether claim 44 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

19) Whether claim 50 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

20) Whether claim 52 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine.

21) Whether claim 60 is properly rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner and Paine in view of U.S. Pat. App. Publication No. 2004/0093296 to Phelan et al.

VII. ARGUMENT

Independent claim 1 and its dependent claims 2-21, 23-30, 55, 56, and 58-60 are pending in the application along with independent claim 31 and its dependent claims 32-39, independent claim 40 and its dependent claim 41, independent claim 42 and its dependent claims 43-52, and independent claim 57.

Claims 1-21, 23-52, 55, 56, and 58-60 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter in a Final Office Action mailed December 22, 2010. The Office Action also rejected claims 40 and 41 under 35 U.S.C. § 102(e) for allegedly being anticipated by U.S. Pat. App. Publication No. 2003/0105677 to Skinner. Claims 1-21, 23-39, 42-52, and 55-59 were rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of U.S. Pat. App. Publication No. 2003/0055816 to Paine et al. Claim 60 was rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner and Paine in view of U.S. Pat. App. Publication No. 2004/0093296 to Phelan et al.

A Notice of Appeal and Pre-appeal Brief Request for Review were filed March 8, 2011 in response to the Office Action. A March 23 Notice of Panel Decision from Pre-appeal Brief Review indicated that the panel held a Pre-appeal Brief Conference and found at least one actual issue for appeal. The Decision sustained the rejections of claims 1-21, 23-52, and 55-60 and indicated the application under appeal would proceed to the Board of Patent Appeals and Interferences.

A. Rejection of Claims 1-21, 23-52, 55, 56, and 58-60 Under § 101

Specific arguments against the § 101 rejections of independent claims 1, 40, 42, and 31 are provided in the following paragraphs.

1. Independent Claim 1 is Directed to a Statutory Process

Independent claim 1 is directed to a method that includes "a) selecting at least one candidate advertisement ...; b) selecting an initial plurality of candidate keywords; c) expanding the initial plurality of candidate keywords selected in b) based at least in part on the at least one candidate advertisement selected in a) to form an expanded plurality of candidate keywords; d) creating an advertisement-keyword pair for each

candidate advertisement selected in a) and each candidate keyword ...; **e)** estimating a click-through rate for each advertisement-keyword pair created in d); **f)** calculating a return on advertising investment (ROAI) for each advertisement-keyword pair created in d) based at least in part on the corresponding click-through rate estimated in e); **g)** calculating an **optimized** bid for each advertisement-keyword pair created in d) based at least in part on the corresponding ROAI calculated in f); and **h) automatically** submitting the optimized bids for each advertisement-keyword pair calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c)." This rejection of claim 1 is in **error** because the claim is directed to a statutory process under § 101.

The Office Action argues the subject claim fails the machine-or-transformation test, which requires that the claimed subject matter either: (1) be tied to another statutory class; or (2) transform the underlying subject matter (such as an article or a material) to a different state or thing. However, for the following reasons, Appellants respectfully submit that claim 1 is directed towards statutory subject matter.

With respect to a transformation, it is respectfully submitted that the Supreme Court precedent and recent Federal Circuit decisions cited by the Office Action do not require a physical transformation. Indeed, at 450 U.S. 192, in cited *Diamond v. Diehr*, the Supreme Court indicated that --when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claims satisfies the requirements of § 101-- (emphasis added). In this regard, Appellants note that the Court could have used the word "physical" and did not. Further, *Webster's Third New International Dictionary* principal Copyright 1961, Copyright 1993 by Merriam-Webster, Inc., indicates that article means *inter alia*: 3a: a particular item of business...6a: a thing of a particular class or kind as distinct from a thing of another class or kind.

Under the machine-or-transformation test, Appellants respectfully submit that claim 1 is both tied to a machine and transforms the underlying subject matter of claim 1

to a different state. Namely, at least one of elements e) through h) (i.e., estimating a click-through rate, calculating an ROAI, calculating an optimized bid, and automatically submitting the optimized bid) of claim 1 inherently require a computer or a processor to be performed. In particular, Appellants note that the bid calculated in element g) is "optimized" and the bid submitted in element h) is "automatically" submitted. Additionally, claim 1 transforms data pertaining to selected keywords and selected advertisements to optimized bids for advertisement-keyword pairs. It is respectfully submitted that optimized bids are particular items of business and/or things of a particular class or kind as distinct from a thing of another class or kind, and therefore an article.

Based at least on the foregoing, it is submitted that this rejection of claim 1 is in **error** and that claim 1 is directed to a statutory process under § 101. Accordingly, Appellants respectfully request that the rejections of independent claim 1 and claims dependent thereon (i.e., claims 2-21, 23-30, 55, 56, and 58-60) under § 101 be withdrawn.

2. Independent Claim 40 is Directed to a Statutory Process

Independent claim 40 is directed to a method that includes "a) selecting at least one candidate advertisement ...; b) selecting a plurality of candidate publisher web pages ...; c) creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b); **d)** estimating a click-through rate for each advertisement-publisher web page pair created in c); **e)** calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair created in c) based at least in part on the corresponding click-through rate estimated in d); **f)** calculating an **optimized** bid for each advertisement-publisher web page pair created in c) based at least in part on the corresponding ROAI calculated in e); and **g)** **automatically** submitting the optimized bids for each advertisement-publisher web page pair calculated in f) to the competitive bidding process for placement of each candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b)." This rejection of claim 40 is in **error** because the claim is directed to a statutory process under § 101.

The Office Action rejected claim 40 under § 101 for the same reasons used in the rejection of claim 1 under § 101. Therefore, the arguments used above to show that claim 1 is directed to a statutory process under § 101 also serve to show that claim 40 is directed to a statutory process under § 101.

Based at least on the foregoing, it is submitted that this rejection of claim 40 is in **error** and that claim 40 is directed to a statutory process under § 101. Accordingly, Appellants respectfully request that the rejections of independent claim 40 and claims dependent thereon (i.e., claim 41) under § 101 be withdrawn.

3. Independent Claim 42 is Directed to a Statutory Process

Independent claim 42 is directed to a method that includes "a) selecting at least one candidate advertisement ...; **b)** selecting one or more keywords based at least in part on content of the at least one candidate advertisement selected in a) to **optimize** the keyword selecting and provide one or more optimized keywords; **c)** creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b) ...; **d)** calculating an **optimized** bid for each advertisement-keyword pair created in c) based at least in part on the one or more optimized keywords selected in b); and **e)** **automatically** submitting the optimized bids for each advertisement-keyword pair calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords selected in b)." This rejection of claim 42 is in **error** because the claim is directed to a statutory process under § 101.

The Office Action rejected claim 42 under § 101 for the same reasons used in the rejection of claim 1 under § 101. Therefore, the arguments used above to show that claim 1 is directed to a statutory process under § 101 also serve to show that claim 42 is directed to a statutory process under § 101.

Based at least on the foregoing, it is submitted that this rejection of claim 42 is in **error** and that claim 42 is directed to a statutory process under § 101. Accordingly, Appellants respectfully request that the rejections of independent claim 42 and claims dependent thereon (i.e., claims 43-52) under § 101 be withdrawn.

4. Independent Claim 31 is Directed to Statutory Subject Matter

Independent claim 31 is directed to a server-based apparatus that includes "an advertisement selection system ...; a keyword selection system ...; an advertisement-keyword selection system ...; and a bid determination system." This rejection of claim 31 is in **error** because the claim is directed to a statutory machine under § 101.

The Office Action argues that claim 31 recites an apparatus that appears to comprise merely software modules and that is just descriptive material and non-statutory under § 101. Notably, the elements (e.g., advertisement selection system, keyword selection system, advertisement-keyword selection system, and bid determination system) of claim 31 are each directed to physical components of a server-based apparatus. As such, the apparatus claim qualifies as a machine, which is an enumerated statutory category, under § 101.

In support the § 101 rejection of claim 31, the Office Action relies on MPEP 2106.01. However, Appellants notes that MPEP 2106.01 states the following:

> Computer programs are often recited as part of a claim. **USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine**. In such a case, the **claim remains statutory irrespective of the fact that a computer program is included in the claim**. The same result occurs when a **computer program is used in a computerized process where the computer executes the instructions set forth in the computer program**. Only when the claimed invention **taken as a whole** is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory. See MPEP 2106.01(I), 3rd paragraph (emphasis added).

Appellants note that the citation above from the MPEP shows that the Office Action assertions are in **error** and in conflict with the very MPEP guidelines referred to in the Office Action. In other words, it is **error** to classify independent claim 31 and

claims that depend thereon (i.e., claims 32-39) as being directed, as a whole, to "software per se" or "functional descriptive material" because the claims, taken as a whole, are not directed to mere program listings.

Based at least on the foregoing, it is submitted that this rejection of claim 31 is in **error** and that claim 31 is directed to a statutory subject matter under § 101. Accordingly, Appellants respectfully request that the rejections of independent claim 31 and claims dependent thereon (i.e., claims 32-39) under § 101 be withdrawn.

B. Rejection of Claims 40 and 41 Under § 102

A specific argument against the § 102(e) rejection of independent claim 40 over Skinner is provided in the following paragraphs.

1. Independent Claim 40 Patentably Distinguishes Over Skinner

Independent claim 40 is directed to a method that includes "**a)** selecting at least one candidate advertisement ... for subsequent placement in at least one publisher web page ...; **c)** creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b); ... **f)** calculating an optimized bid for each advertisement-publisher web page pair ...; and **g)** automatically submitting the optimized bids for each advertisement-publisher web page pair calculated in f) to the competitive bidding process for placement of each candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b)." The Office Action relies on Skinner for disclosure of claim 40. This § 102 rejection of claim 1 in reliance on Skinner is in **error** on any one of at least four grounds because Skinner does not disclose or fairly suggest the features claimed in elements a), c), f), or g).

As for element a), the Office Action relies on paragraphs 14, 18 and 37-43; FIG. 2, items 42-44; and FIG. 3, item 50 of Skinner for disclosure of "selecting at least one candidate advertisement." However, the cited portions of Skinner merely disclose how bids for auctioned positions in a search results lists may be placed by advertisers. For successful bids, the Skinner process results in improved placement of the winning advertiser's listing in search results lists. The winning advertiser's listing in Skinner is

merely a link to an advertiser's web site. Notably, the Skinner process does not consider selection of an advertisement as part of the bidding process.

The Office Action appears to relate the Skinner "search terms" to the "candidate advertisement" in element a) of claim 40. More specifically, the Office Action relies on Webster's Dictionary definition of "advertisement" as a "public notice." This reasoning appears to presume that each keyword displayed by a search engine is a public notice; therefore, the Office Action appears to conclude that each keyword (e.g., Skinner search term) displayed by a search engine is an advertisement (e.g., candidate advertisement of element a) in claim 40).

However, this reasoning is flawed because it is not appropriate to substitute all types of "public notice" (e.g., "search term" from Skinner) for "advertisement." For example, all types of "public notice" would include public notices that were derogatory or negative to the corresponding advertiser along with public notices that were favorable or positive. More appropriate definitions for "advertisement" in the context of claim 1 may be found from the following sources:

> Oxford Dictionary – a notice or announcement in a public medium promoting a product, service, or event or publicizing a job vacancy;
>
> Cambridge Dictionary – a picture, short film, song, etc. which tries to persuade people to buy a product or service;
>
> Business.com – paid, non-personal, public communication about causes, goods and services, ideas, organizations, people, and places ..., their objective is to change the thinking pattern (or buying behavior) of the recipient, so that he or she is persuaded to take the action desired by the advertiser; and
>
> Internetadsales.com – a paid announcement or search transaction, as for example used with goods for sale or calling attention to the public to a marketing or branding message for the promotion of a product or service.

Each of the "advertisement" definitions cited above would require a "public notice" to be "promotional" or "persuasive" with respect to a corresponding advertiser in order to substitute "advertisement" for the corresponding "public notice." Based on the

foregoing, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 40 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Skinner "search terms" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in element a).

Accordingly, it is not appropriate to substitute "search term" for "advertisement" in the phrase "selecting at least one candidate advertisement" in element a) of claim 40 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element a).

As for element c), the Office Action relies on paragraphs 12 and 39-40; FIG. 2, items 42-44; and FIG. 3, item 78 of Skinner for disclosure of "creating an advertisement-publisher web page pair for each candidate advertisement ... and each candidate publisher web page." However, the cited portions of Skinner merely disclose the presence of an online marketing media (OMM), such as a search engine. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Notably, Appellants did not find reference to creating combinations of advertisements and publisher web pages to create advertisement-publisher web page pairs as recited in element c) of claim 40. Appellants respectfully submit that the mere presence of an OMM (e.g., search engine) does not necessarily require creating an advertisement-publisher web page pair for each selected advertisements and each selected publisher web page. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element c).

As for element f), the Office Action relies on paragraphs 44-48 of Skinner for disclosure of "calculating an optimized bid for each advertisement-publisher web page pair." However, the cited portions of Skinner merely disclose how bids for auctioned positions in a search results list may be placed by advertisers and how a maximum bid for the auctioned position might be determined by an OMM for the advertiser. Also, as stated above, the Skinner process does not disclose or fairly suggest selection of the advertisement as a variable in calculating a bid during the bidding process. The cited portions of Skinner disclose how a maximum bid is evaluated to determine if it is a good buy and how the maximum bid is maintained, decreased, or removed. Notably, Skinner

does not refer to the maximum bid as an optimized bid for an advertisement-publisher web page pair as recited in element f) of claim 40. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element f).

As for element g), the Office Action relies on paragraphs 14-20 of Skinner for disclosure of "submitting the optimized bids for each advertisement-publisher web page pair ... to the competitive bidding process." However, the cited portions of Skinner merely disclose how bids for auctioned positions in a search results list may be placed by advertisers. For successful bids, the Skinner process results in placement of the winning advertiser's search listing in search results lists. Notably, the winning advertiser's listing in Skinner is merely a link to an advertiser's web site. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Thus, the bids submitted in Skinner are not for an advertisement-publisher web page pair. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element g).

Based at least on the foregoing, it is submitted that this rejection of claim 40 is in **error** and that claim 40 is patentably distinguished from Skinner. Accordingly, Appellants respectfully submit that independent claim 40 and claims dependent thereon (i.e., claim 41) are currently in condition for allowance.

C. Rejection of Claims 1-21, 23-30, 55, 56, 58, and 59 Under § 103

Specific arguments against the § 103(a) rejections of independent claim 1 and dependent claims 6, 8, 9, 20, 25, and 59 over the combination of Skinner and Paine are provided in the following paragraphs.

1. Independent Claim 1 Patentably Distinguishes Over the Combination of Skinner and Paine

Independent claim 1 is directed to a method that includes "**a)** selecting at least one candidate advertisement ... for subsequent placement in search results lists ...; **c)** expanding the initial plurality of candidate keywords selected in b) based ... on the ... candidate advertisement selected in a) to form an expanded plurality of candidate keywords; **d)** creating an advertisement-keyword pair for each candidate advertisement selected in a) and each candidate keyword ...; **g)** calculating an optimized bid for each

advertisement-keyword pair ...; and **h)** automatically submitting the optimized bids for each advertisement-keyword pair calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c)." This obviousness rejection is in **error** on any one of at least five grounds because neither Skinner nor Paine disclose or fairly suggest elements a), c), d), g), or h) of claim 1. The Office Action reasons for obviousness do not cure these errors because they do not explicitly state how any of elements a), c), d), g), or h) would have been obvious based on Skinner, Paine, or the combination thereof.

As for element a), the Office Action does not cite Paine for disclosure of this element of claim 1. Thus, the Office Action completely relies on Skinner for disclosure of element a). More specifically, the Office Action relies on paragraph 14 of Skinner for disclosure of "selecting at least one candidate advertisement." However, the cited portion of Skinner merely discloses how bids for auctioned positions in a search results lists may be placed by advertisers. For successful bids, the Skinner process results in placement of the winning advertiser's listing in search results lists. The winning advertiser's listing in Skinner is merely a link to an advertiser's web site. Notably, the Skinner process does not consider selection of an advertisement as part of the bidding process.

The Office Action appears to relate the Skinner "search terms" to the "candidate advertisement" in element a) of claim 1. More specifically, the Office Action relies on Webster's Dictionary definition of "advertisement" as a "public notice." This reasoning appears to presume that each keyword displayed by a search engine is a public notice; therefore, the Office Action appears to conclude that each keyword (e.g., Skinner search term) displayed by a search engine is an advertisement (e.g., candidate advertisement of element a) in claim 1).

However, this reasoning is flawed because it is not appropriate to substitute all types of "public notice" (e.g., "search term" from Skinner) for "advertisement." For example, all types of "public notice" would include public notices that were derogatory or negative to the corresponding advertiser along with public notices that were favorable or

positive. More appropriate definitions for "advertisement" in the context of claim 1 may be found from the following sources:

> Oxford Dictionary – a notice or announcement in a public medium promoting a product, service, or event or publicizing a job vacancy;
>
> Cambridge Dictionary – a picture, short film, song, etc. which tries to persuade people to buy a product or service;
>
> Business.com – paid, non-personal, public communication about causes, goods and services, ideas, organizations, people, and places ..., their objective is to change the thinking pattern (or buying behavior) of the recipient, so that he or she is persuaded to take the action desired by the advertiser; and
>
> Internetadsales.com – a paid announcement or search transaction, as for example used with goods for sale or calling attention to the public to a marketing or branding message for the promotion of a product or service.

Each of the "advertisement" definitions cited above would require a "public notice" to be "promotional" or "persuasive" with respect to a corresponding advertiser in order to substitute "advertisement" for the corresponding "public notice." Based on the foregoing, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 1 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Skinner "search terms" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in element a).

Accordingly, it is not appropriate to substitute "search term" for "advertisement" in the phrase "selecting at least one candidate advertisement" in element a) of claim 1 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element a).

As for element c), the Office Action admits that Skinner does not disclose this element of claim 1. Thus, the Office Action completely relies on Paine for disclosure of element c). More specifically, the Office Action relies on paragraphs 4 and 13 of Paine for disclosure of "expanding the initial plurality of keywords ... based ... on the ...

candidate advertisement ... to form an expanded plurality of keywords." However, the cited portions of Paine merely disclose two techniques for making search term recommendations to an advertiser. The first technique involves spidering, wherein the advertiser's website is searched for recurring terms on an advertiser's web site. The second technique involves collaborative filtering, wherein the advertiser is compared with other, similar advertisers and search terms the other advertisers have chosen are recommended. Notably, the cited portions of Paine do not disclose or fairly suggest expanding selected keywords as recited in element c) of claim 1. Rather, the cited portions of Paine involve the initial selection of initial keywords. Further, the cited portions of Paine do not disclose or fairly suggest expanding selected keywords based on a selected candidate advertisement as recited in element c) of claim 1. Namely, the Office Action fails to provide any citation for disclosure of keyword expansion on the basis of an advertisement. Therefore, it is not appropriate to rely on the cited portions of Paine for disclosure of element c).

As for element d), the Office Action does not cite Paine for disclosure of this element of claim 1. Thus, the Office Action completely relies on Skinner for disclosure of element d). More specifically, the Office Action relies on paragraphs 37-39 of Skinner for disclosure of "creating an advertisement-keyword pair for each candidate advertisement ... and each candidate keyword." However, the cited portions of Skinner merely disclose the presence of an online marketing media (OMM), such as a search engine. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Notably, Appellants did not find reference to creating combinations of advertisements and keywords to create advertisement-keyword pairs as recited in element d) of claim 1. Appellants respectfully submit that the mere presence of an OMM (or search engine) does not necessarily require creating an advertisement-keyword pair for each selected advertisements and each selected keyword. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element d).

As for element g), the Office Action does not cite Paine for disclosure of this element of claim 1. Thus, the Office Action completely relies on Skinner for disclosure of element g) of claim 1. More specifically, the Office Action relies on paragraphs 44-60

of Skinner for disclosure of "calculating an optimized bid for each advertisement-keyword pair." However, the cited portions of Skinner merely disclose how bids for auctioned positions in a search results list may be placed by advertisers. Notably, the Skinner process does not consider an actual advertisement to be placed in the search results list as a variable in calculating a bid during the bidding process. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element g).

As for element h), the Office Action does not cite Paine for disclosure of this element of claim 1. Thus, the Office Action completely relies on Skinner for disclosure of element h). More specifically, the Office Action relies on paragraphs 14-20 and 37-39 of Skinner for disclosure of "submitting the optimized bids for each advertisement-keyword pair ... to the competitive bidding process." However, the cited portions of Skinner merely disclose how bids for auctioned positions in a search results list may be placed by advertisers. For successful bids, the Skinner process results in placement of the winning advertiser's search listing in search results lists. Notably, the winning advertiser's listing in Skinner is merely a link to an advertiser's web site. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Thus, the bids submitted in Skinner are not for an advertisement-keyword pair. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element h).

Based at least on the foregoing, it is submitted that this rejection of claim 1 is in **error** and that claim 1 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that independent claim 1 and claims dependent thereon (i.e., claims 2-21, 23-30, 55, 56, and 58-59) are currently in condition for allowance.

2. Dependent Claim 6 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 6 is directed to a method in which "at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from content of the at least one candidate advertisement." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 6. The Office Action reasons for

obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action admits that Skinner does not disclose the limitations of claim 6. Thus, the Office Action completely relies on Paine for disclosure of claim 6. More specifically, the Office Action relies on paragraphs 4 and 13 of Paine for disclosure of the limitations of claim 6. However, the cited portions of Paine merely disclose two techniques for making search term recommendations to an advertiser. The first technique involves spidering, wherein the advertiser's website is searched for recurring terms on an advertiser's web site. The second technique involves collaborative filtering, wherein the advertiser is compared with other, similar advertisers and search terms the other advertisers have chosen are recommended. Notably, the cited portions of Paine do not disclose or fairly suggest generating any keyword based on the content of a candidate advertisement as recited in claim 6. Namely, the Office Action fails to provide any citation for disclosure of keyword selection on the basis of an advertisement.

Based at least on the foregoing, it is submitted that this rejection of claim 6 is in **error** and that claim 6 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 6 is currently in condition for allowance for at least these additional reasons.

3. Dependent Claim 8 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 8 is directed to a method in which "the click-through rate for each advertisement-keyword pair is estimated by placing the corresponding candidate advertisement in a search results list on a trial basis." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 8. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 8. Thus, the Office Action completely relies on Skinner for disclosure of claim 8. More specifically, the Office Action relies on paragraphs 38, 39, and 43 for disclosure of claim

8. However, the cited portions of Skinner merely disclose how a database of search terms relating to an advertiser's service or product is maintained using certain criteria relating to the search term's effectiveness (e.g., impressions, clicks, click-throughs, and sales) at a given period of time (e.g., differing times of day, month, and year). Notably, Skinner does not estimate the click-through rate for a candidate advertisement or a candidate keyword, much less an advertisement-keyword pair. Moreover, Skinner does not place a candidate advertisement in a search results list on a trial basis.

Based at least on the foregoing, it is submitted that this rejection of claim 8 is in **error** and that claim 8 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 8 is currently in condition for allowance for at least these additional reasons.

4. Dependent Claim 9 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 9 is directed to a method in which "the click-through rate for each advertisement-keyword pair is estimated based at least in part on the relevance of content in the corresponding candidate advertisement to the one or more candidate keywords for the corresponding advertisement-keyword pair." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 9. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 9. Thus, the Office Action completely relies on Skinner for disclosure of claim 9. More specifically, the Office Action relies on paragraphs 37-44 for disclosure of claim 9. However, the cited portions of Skinner merely disclose how a database of search terms relating to an advertiser's service or product is maintained using certain criteria relating to the search term's effectiveness (e.g., impressions, clicks, click-throughs, and sales) at a given period of time (e.g., differing times of day, month, and year). Notably, Skinner does not estimate the click-through rate for a candidate advertisement or a candidate keyword, much less estimating a click-through rate based on the relevance of a candidate advertisement to a candidate keyword for an advertisement-keyword pair.

Based at least on the foregoing, it is submitted that this rejection of claim 9 is in **error** and that claim 9 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 9 is currently in condition for allowance for at least these additional reasons.

5. Dependent Claim 20 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 20, which depends from claim 11, is directed to a method in which the ROAI calculating in f) also includes "considering an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 20. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 20. Thus, the Office Action completely relies on Skinner for disclosure of claim 20. More specifically, the Office Action relies on paragraphs 41-43 and FIG. 2 of Skinner for disclosure of claim 20. However, the cited portions of Skinner merely disclose how a database of search terms relating to an advertiser's service or product is maintained using certain criteria relating to the search term's effectiveness (e.g., impressions, clicks, click-throughs, and sales) at a given period of time (e.g., differing times of day, month, and year). Notably, Skinner does not consider an experience level in a user in conjunction with calculating a bid.

Based at least on the foregoing, it is submitted that this rejection of claim 20 is in **error** and that claim 20 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 20 is currently in condition for allowance for at least these additional reasons.

6. Dependent Claim 25 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 25, which depends from claim 24, which depends from claim 23, which depends from claim 1, is directed to a method in which "the set of bid

combinations is sorted by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order." This obviousness rejection is in **error** because neither Skinner nor Paine et al disclose or fairly suggest the limitations of claim 25. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 25. Thus, the Office Action completely relies on Skinner for disclosure of claim 25. More specifically, the Office Action relies on paragraphs 44-47 and 58 of Skinner for disclosure of claim 25. However, the cited portions of Skinner merely disclose sorting data collected from an online marketing media (OMM) database by a primary key and according to time periods in which an event or impression took place. The designated keycode is identified as an example, of the Skinner primary key. After the sorting, Skinner compiles a master data set and identifies well defined data sets. For well defined data sets, the Skinner process calculates a new return on advertising spent (ROAS) value and a new acceptable maximum bid. Notably, Skinner does not sort bids by a product of the click-through rate and ROAI or place insertions based on such sorted bids.

Based at least on the foregoing, it is submitted that this rejection of claim 25 is in **error** and that claim 25 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 25 is currently in condition for allowance for at least these additional reasons.

7. Dependent Claim 59 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 59 is directed to a method that also includes "performing a competition assessment in which a competition assessment agent collects and analyzes information from at least one competitor's website to select one or more competitor keywords, wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is based at least in part on the competitor keywords from the competition assessment." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of

claim 59. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action admits that Skinner does not disclose the "performing a competition assessment" element of claim 59. Thus, the Office Action completely relies on Paine for disclosure of claim 59. More specifically, the Office Action relies on paragraph 4 and the Abstract of Paine for disclosure of the "performing a competition assessment" element of claim 59. However, the cited portions of Paine merely disclose two techniques for making search term recommendations to an advertiser. The first technique involves spidering, wherein the advertiser's website is searched for recurring terms on an advertiser's web site. The second technique involves collaborative filtering, wherein the advertiser is compared with other, similar advertisers and search terms the other advertisers have chosen are recommended. Notably, the cited portions of Paine do not disclose or fairly suggest generating any keyword based on the content of a competitor's web site as recited in claim 59. Namely, the Office Action fails to provide any citation for disclosure of keyword selection on the basis of a competitor's web site.

Based at least on the foregoing, it is submitted that this rejection of claim 59 is in **error** and that claim 59 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 59 is currently in condition for allowance for at least these additional reasons.

D. Rejection of Claim 57 Under § 103

A specific argument against the § 103(a) rejection of independent claim 57 over the combination of Skinner and Paine is provided in the following paragraphs.

1. Independent Claim 57 Patentably Distinguishes Over the Combination of Skinner and Paine

Independent claim 57 is directed to a computer program product that includes a computer usable medium for causing: "**i)** selection of at least one candidate advertisement ... for subsequent placement in search results lists ...; **iii)** expansion of the initial plurality of candidate keywords selected in ii) based ... on the ... candidate advertisement selected in i) to form an expanded plurality of candidate keywords ...; **iv)**

creation of an advertisement-keyword pair for each candidate advertisement selected in i) and each candidate keyword ...; **v)** determination of an optimized bid for each advertisement-keyword pair ...; and **vi)** automatic submission of the optimized bids for each advertisement-keyword pair determined in v) to the competitive bidding process for placement of each candidate advertisement selected in i) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from iii)." This obviousness rejection is in **error** on any one of at least five grounds because neither Skinner nor Paine disclose or fairly suggest sub-elements i), iii), iv), v), or vi) of claim 57. The Office Action reasons for obviousness do not cure these errors because they do not explicitly state how any of sub-elements i), iii), iv), v), or vi) would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action uses the same reasons for rejection of claim 57 as the § 103 rejection of claim 1. Therefore, the disclosures of Skinner and Paine identified above and the arguments distinguishing claim 1 also serve to distinguish claim 57.

As for sub-element i), the Office Action does not cite Paine for disclosure of this sub-element of claim 57. Thus, the Office Action completely relies on Skinner for disclosure of sub-element i). More specifically, the Office Action relies on paragraph 14 of Skinner for disclosure of "selection of at least one candidate advertisement." Notably, the Skinner process does not consider selection of an advertisement as part of the bidding process. Additionally, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 57 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Skinner "search terms" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in sub-element i) of claim 57. Accordingly, it is not appropriate to substitute "search term" for "advertisement" in the phrase "selecting at least one candidate advertisement" in sub-element i) of claim 57 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of sub-element i).

As for sub-element iii), the Office Action admits that Skinner does not disclose this sub-element of claim 57. Thus, the Office Action completely relies on Paine for

disclosure of sub-element iii). More specifically, the Office Action relies on paragraph 4 and 13 of Paine for disclosure of "expansion of the initial plurality of keywords ... based ... on the ... candidate advertisement ... to form an expanded plurality of keywords." Notably, the cited portions of Paine do not disclose or fairly suggest expanding selected keywords as recited in sub-element iii) of claim 57. Therefore, it is not appropriate to rely on the cited portions of Paine for disclosure of sub-element iii).

As for sub-element iv), the Office Action does not cite Paine for disclosure of this sub-element of claim 57. Thus, the Office Action completely relies on Skinner for disclosure of sub-element iv). More specifically, the Office Action relies on paragraphs 37-39 of Skinner for disclosure of "creation of an advertisement-keyword pair for each candidate advertisement ... and each candidate keyword." Notably, Appellants did not find reference to creating combinations of advertisements and keywords to create advertisement-keyword pairs as recited in sub-element iv) of claim 57. Appellants respectfully submit that the mere presence of an online marketing media (OMM) (e.g., search engine) does not necessarily require creating an advertisement-keyword pair for each selected advertisements and each selected keyword. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of sub-element iv).

As for sub-element v), the Office Action does not cite Paine for disclosure of this sub-element of claim 57. Thus, the Office Action completely relies on Skinner for disclosure of sub-element v). More specifically, the Office Action relies on paragraphs 44-60 of Skinner for disclosure of "calculation of an optimized bid for each advertisement-keyword pair." Notably, the Skinner process does not consider an actual advertisement to be placed in the search results list as a variable in calculating a bid during the bidding process. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of sub-element v).

As for sub-element vi), the Office Action does not cite Paine for disclosure of this sub-element of claim 57. Thus, the Office Action completely relies on Skinner for disclosure of sub-element vi). More specifically, the Office Action relies on paragraphs 14-20 and 37-39 of Skinner for disclosure of "submission of the optimized bids for each advertisement-keyword pair ... to the competitive bidding process." Notably, the winning advertiser's listing in Skinner is merely a link to an advertiser's web site. Also,

as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Thus, the bids submitted in Skinner are not for an advertisement-keyword pair. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of sub-element vi).

Based at least on the foregoing, it is submitted that this rejection of claim 57 is in **error** and that claim 57 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that independent claim 57 is currently in condition for allowance.

E. Rejection of Claims 31-39 Under § 103

Specific arguments against the § 103(a) rejections of independent claim 31 and dependent claims 36 and 39 over the combination of Skinner and Paine are provided in the following paragraphs.

1. Independent Claim 31 Patentably Distinguishes Over the Combination of Skinner and Paine

Independent claim 31 is directed to an apparatus that includes "an **advertisement selection system** for **selecting** at least one candidate advertisement ... for subsequent placement in search results lists; a **keyword selection system** ... for selecting an initial plurality of candidate keywords and for **expanding** the initial plurality of candidate keywords based ... on the ... candidate advertisement selected by the advertisement selection system to form an expanded plurality of candidate keywords ...; an **advertisement-keyword selection system** ... for **creating** an advertisement-keyword pair for each candidate advertisement selected by the advertisement selection system and each candidate keyword; and a **bid determination system** ... for **calculating** an optimized bid for each advertisement-keyword pair ... and for automatically **submitting** the optimized bids for each advertisement-keyword pair to the competitive bidding process for placement of each candidate advertisement selected by the advertisement selection system in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of keywords resulting from expansion of the initial plurality of candidate keywords by the keyword selection system." This obviousness rejection is in **error** on any one of at least five grounds because neither Skinner nor Paine disclose or fairly suggest the "selecting"

limitation of the "advertisement selection system" element, the "expanding" limitation of the "keyword selection system" element, the "creating" limitation of the "advertisement-keyword selection system" element, or the "calculating" or "submitting" limitations of the "bid determination system" element of claim 31. The Office Action reasons for obviousness do not cure these errors because they do not explicitly state how any of these limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action uses similar reasons for rejection of claim 31 as the § 103 rejection of claim 1. Therefore, the disclosures of Skinner and Paine al. identified above and the arguments distinguishing claim 1 also serve to distinguish claim 31.

As for the "selecting" limitation, the Office Action does not cite Paine for disclosure of this limitation of claim 31. Thus, the Office Action completely relies on Skinner for disclosure of the "selecting" limitation. More specifically, the Office Action relies on paragraph 14 and FIG. 3 of Skinner for disclosure of an "advertisement selection system" for "selecting of at least one candidate advertisement." Notably, the Skinner process does not consider selection of an advertisement as part of the bidding process. Additionally, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 31 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Skinner "search terms" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in the "selecting" limitation of claim 31. Accordingly, it is not appropriate to substitute "search term" for "advertisement" in the phrase "selecting at least one candidate advertisement" in the "selecting" limitation of claim 31 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of the "selecting" limitation.

As for the "expanding" limitation, the Office Action admits that Skinner does not disclose this limitation of claim 31. Thus, the Office Action completely relies on Paine for disclosure of the "expanding" limitation. More specifically, the Office Action relies on paragraph 13 of Paine for disclosure of a "keyword selection system" for "expanding the initial plurality of keywords ... based ... on the ... candidate advertisement ... to form an expanded plurality of keywords." Notably, the cited portions of Paine do not disclose or

fairly suggest expanding selected keywords as recited in the "expanding" limitation of claim 31. Therefore, it is not appropriate to rely on the cited portions of Paine for disclosure of the "expanding" limitation.

As for the "creating" limitation, the Office Action does not cite Paine for disclosure of this limitation of claim 31. Thus, the Office Action completely relies on Skinner for disclosure of the "creating" limitation. More specifically, the Office Action relies on paragraphs 37-39 and FIG. 4, item 116 of Skinner for disclosure of an "advertisement-keyword selection system" for "creating an advertisement-keyword pair for each candidate advertisement ... and each candidate keyword." Notably, Appellants have failed to find reference to creating combinations of advertisements and keywords to create advertisement-keyword pairs as recited in the "creating" limitation of claim 31. Appellants respectfully submit that the mere presence of an online marketing media (OMM) (e.g., a search engine) does not necessarily require creating an advertisement-keyword pair for each selected advertisements and each selected keyword. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of the "creating" limitation.

As for the "calculating" limitation, the Office Action does not cite Paine for disclosure of this limitation of claim 31. Thus, the Office Action completely relies on Skinner for disclosure of the "calculating" limitation. More specifically, the Office Action relies on paragraphs 44-60 of Skinner for disclosure of a "bid determination system" for "calculating an optimized bid for each advertisement-keyword pair." Notably, the Skinner process does not consider an actual advertisement to be placed in the search results list as a variable in calculating a bid during the bidding process. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of the "calculating" limitation.

As for the "submitting" limitation, the Office Action does not cite Paine for disclosure of this limitation of claim 31. Thus, the Office Action completely relies on Skinner for disclosure of the "submitting" limitation. More specifically, the Office Action relies on paragraphs 14-20 and 37-39 of Skinner for disclosure of a "bid determination system" for "submitting the optimized bids for each advertisement-keyword pair ... to the competitive bidding process." Notably, the winning advertiser's listing in Skinner is

merely a link to an advertiser's web site. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Thus, the bids submitted in Skinner are not for an advertisement-keyword pair. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of the "submitting" limitation.

Based at least on the foregoing, it is submitted that this rejection of claim 31 is in **error** and that claim 31 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that independent claim 31 and claims dependent thereon (i.e., claims 32-39) are currently in condition for allowance.

2. Dependent Claim 36 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 36, which depends from claim 33, is directed to an apparatus in which "the ROAI agent also considers an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 36. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action uses the same reasons for rejection of claim 36 as the § 103 rejection of claim 20. Therefore, the disclosures of Skinner and Paine identified above and the arguments distinguishing claim 20 also serve to distinguish claim 36.

The Office Action does not cite Paine for disclosure of the limitations of claim 36. Thus, the Office Action completely relies on Skinner for disclosure of claim 36. More specifically, the Office Action relies on paragraphs 41-43 and FIG. 2 of Skinner for disclosure of claim 36. Notably, Skinner does not consider an experience level in a user in conjunction with calculating a bid.

Based at least on the foregoing, it is submitted that this rejection of claim 36 is in **error** and that claim 36 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submits that claim 36 is currently in condition for allowance for at least these additional reasons.

3. Dependent Claim 39 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 39 depends from claim 38 which in turn depends from claim 37. Claim 39 is directed to an apparatus in which "the bid determination system sorts the optimal set of bid combinations by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 39. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action uses the same reasons for rejection of claim 39 as the § 103 rejection of claim 25. Therefore, the disclosures of Skinner and Paine identified above and the arguments distinguishing claim 25 also serve to distinguish claim 39.

The Office Action does not cite Paine for disclosure of the limitations of claim 39. Thus, the Office Action completely relies on Skinner for disclosure of claim 39. More specifically, the Office Action relies on paragraphs 44-47 and 58 of Skinner for disclosure of claim 39. Notably, Skinner does not sort bids by a product of the click-through rate and ROAI or place insertions based on such sorted bids.

Based at least on the foregoing, it is submitted that this rejection of claim 39 is in **error** and that claim 39 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submits that claim 39 is currently in condition for allowance for at least these additional reasons.

F. Rejection of Claims 42-52 Under § 103

Specific arguments against the § 103(a) rejections of independent claim 42 and dependent claims 44, 50, and 52 over the combination of Skinner and Paine are provided in the following paragraphs.

1. Independent Claim 42 Patentably Distinguishes Over the Combination of Skinner and Paine

Independent claim 42 is directed to a method that includes "**a)** selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists ...; **b)** selecting one or more keywords based at least in part on

content of the at least one candidate advertisement ... to ... provide one or more optimized keywords; **c)** creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b) ...; **d)** calculating an optimized bid for each advertisement-keyword pair ...; and **e)** automatically submitting the optimized bids for each advertisement-keyword pair calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords." This obviousness rejection is in **error** on any one of at least five grounds because neither Skinner nor Paine disclose or fairly suggest elements a), b), c), d), or e) of claim 42. The Office Action reasons for obviousness do not cure these errors because they do not explicitly state how any of elements a), b), c), d), or e) would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action uses similar reasons for rejection of claim 42 as the § 103 rejection of claim 1. Therefore, the disclosures of Skinner and Paine identified above and the arguments distinguishing claim 1 also serve to distinguish claim 42.

As for element a), the Office Action does not cite Paine for disclosure of this element of claim 42. Thus, the Office Action completely relies on Skinner for disclosure of element a). More specifically, the Office Action relies on paragraphs 14, 18, and 37-43; FIG. 2, items 42-44; and FIG. 3, item 50 of Skinner for disclosure of "selecting at least one candidate advertisement." Notably, the Skinner process does not consider selection of an advertisement as part of the bidding process. Additionally, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 42 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Skinner "search terms" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in element a) of claim 42. Accordingly, it is not appropriate to substitute "search term" for "advertisement" in the phrase "selecting at least one candidate advertisement" in element a) of claim 42 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element a).

As for element b), the Office Action admits that Skinner does not disclose this element of claim 42. Thus, the Office Action completely relies on Paine for disclosure of element b). More specifically, the Office Action relies on paragraph 13 of Paine for disclosure of "selecting one or more keywords based ... on content of the at least one candidate advertisement." Notably, the cited portions of Paine do not disclose or fairly suggest selecting any keyword based on the content of any advertisement as recited in element b) of claim 42. Additionally, Appellants respectfully submit that an appropriate definition for "advertisement" in relation to claim 42 is "promotional or persuasive public notice," rather than any type of "public notice." In other words, the Paine "advertiser's web site" would have to be described as "promotional or persuasive" in Skinner to be substituted for the "advertisement" in element b) of claim 42. Accordingly, it is not appropriate to substitute "advertiser's web site" for "advertisement" in the phrase "selecting one or more keywords based ... on ... content of the at least one candidate advertisement" in element b) of claim 42 or vice versa. Therefore, it is not appropriate to rely on the cited portions of Paine for disclosure of element b).

As for element c), the Office Action does not cite Paine for disclosure of this element of claim 42. Thus, the Office Action completely relies on Skinner for disclosure of element c). More specifically, the Office Action relies on paragraphs 37-39 of Skinner for disclosure of "creating an advertisement-keyword pair for each candidate advertisement ... and each optimized keyword." Notably, Appellants did not find reference to creating combinations of advertisements and keywords to create advertisement-keyword pairs as recited in element c) of claim 42. Appellants respectfully submit that the mere presence of an online marketing media (OMM) (e.g., search engine) does not necessarily require creating an advertisement-keyword pair for each selected advertisements and each selected keyword. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element c).

As for element d), the Office Action does not cite Paine for disclosure of this element of claim 42. Thus, the Office Action completely relies on Skinner for disclosure of element d). More specifically, the Office Action relies on paragraphs 44-60 of Skinner for disclosure of "calculating an optimized bid for each advertisement-keyword pair." Notably, the Skinner process does not consider an actual advertisement to be placed in

the search results list as a variable in calculating a bid during the bidding process. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element d).

As for element e), the Office Action does not cite Paine for disclosure of this element of claim 42. Thus, the Office Action completely relies on Skinner for disclosure of element e). More specifically, the Office Action relies on paragraphs 14-20 and 37-60 of Skinner for disclosure of "submitting the optimized bids for each advertisement-keyword pair ... to the competitive bidding process." Notably, the winning advertiser's listing in Skinner is merely a link to an advertiser's web site. Also, as stated above, Skinner does not disclose or fairly suggest selection of the advertisement as part of the bidding process. Thus, the bids submitted in Skinner are not for an advertisement-keyword pair. Therefore, it is not appropriate to rely on the cited portions of Skinner for disclosure of element e).

Based at least on the foregoing, it is submitted that this rejection of claim 42 is in **error** and that claim 42 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that independent claim 42 and claims dependent thereon (i.e., claims 43-52) are currently in condition for allowance.

2. Dependent Claim 44 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 44 is directed to a method in which "the at least one candidate advertisement selected in a) is based at least in part on . . . matching content of each candidate advertisement to one or more candidate keywords." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 44. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action admits that Skinner does not disclose the limitations of claim 44. Thus, the Office Action completely relies on Paine for disclosure of claim 44. More specifically, the Office Action relies on paragraph 13 of Paine for disclosure of the limitations of claim 44. However, the cited portions of Skinner merely disclose how a database of search terms relating to an advertiser's service or product is maintained

using certain criteria relating to the search term's effectiveness (e.g., impressions, clicks, click-throughs, and sales). Notably, Skinner does not use the content of an advertiser web site as criteria for maintaining the database. Moreover, Skinner does not disclose that advertisements are stored in the database or selected based on information maintained in the database.

Based at least on the foregoing, it is submitted that this rejection of claim 44 is in **error** and that claim 44 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submits that claim 44 is currently in condition for allowance for at least these additional reasons.

3. Dependent Claim 50 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 50 is directed to a method that also includes "collecting information from a bidding service provider associated with the search results list, wherein the bidding service provider information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the bidding service provider information is considered in calculating the optimized bids in d)." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 50. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 50. Thus, the Office Action completely relies on Skinner for disclosure of claim 50. More specifically, the Office Action relies on paragraphs 39-43 of Skinner for disclosure of claim 50. However, the cited portions of Skinner merely disclose how information is collected from an online marketing media (OMM) database, a tracking engine database, and an advertiser's database during the bidding process to maximize return on advertising spent (ROAS) by changing bids based on the information collected. Notably, Skinner does not disclose collecting information from a bidding service provider.

Based at least on the foregoing, it is submitted that this rejection of claim 50 is in **error** and that claim 50 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submits that claim 50 is currently in condition for allowance for at least these additional reasons.

4. Dependent Claim 52 Patentably Distinguishes Over the Combination of Skinner and Paine

Dependent claim 52 is directed to a method that also includes "collecting information from a competitor web site associated with a competitor in relation to the advertiser, wherein the competitor web site information is considered in calculating the optimized bids in d)." This obviousness rejection is in **error** because neither Skinner nor Paine disclose or fairly suggest the limitations of claim 52. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, or the combination thereof.

The Office Action does not cite Paine for disclosure of the limitations of claim 52. Thus, the Office Action completely relies on Skinner for disclosure of claim 52. More specifically, the Office Action relies on paragraph 48 of Skinner for disclosure of claim 52. However, the cited portions of Skinner merely disclose how information on competitor bids is collected from an online marketing media (OMM) database. Notably, Skinner does not disclose collecting information from a competitor web site. Moreover, Skinner does not disclose using competitor web site information in calculating optimized bids.

Based at least on the foregoing, it is submitted that this rejection of claim 52 is in **error** and that claim 52 is patentably distinguished from the combination of Skinner and Paine. Accordingly, Appellants respectfully submit that claim 52 is currently in condition for allowance for at least these additional reasons.

G. Rejection of Claim 60 Under § 103

A specific argument against the § 103(a) rejection of claim 60 over the combination of Skinner, Paine, and Phelan is provided in the following paragraphs.

1. Dependent Claim 60 Patentably Distinguishes Over the Combination of Skinner, Paine, and Phelan

Claim 60 is directed to a method that also includes "calculating a competitor ROAI for each competitor keyword based at least in part on the competition assessment, wherein the optimized bids calculated in g) are based at least in part on competitor ROAIs for competitor keywords related to the one or more candidate keywords for advertisement-keyword pairs for corresponding optimized bids." This obviousness rejection is in **error** because the combination of Skinner, Paine, and Phelan does not disclose or fairly suggest the limitations of claim 60. The Office Action reasons for obviousness do not cure this error because they do not explicitly state how the limitations would have been obvious based on Skinner, Paine, Phelan, or any combination thereof.

The Office Action admits that neither Skinner nor Paine disclose the limitations of claim 60. Thus, the Office Action completely relies on Phelan for disclosure of claim 60. More specifically, the Office Action relies on paragraphs 101-106 of Phelan for disclosure of the actual "calculating a competitor ROAI" limitation of claim 60. However, Phelan merely discloses general concepts for analyzing marketing data for effectiveness of advertising, including on-line advertising. Notably, Phelan does not disclose calculating the effectiveness of competitor keyword advertising or a competitor ROAI for a competitor keyword as recited in claim 60.

Based at least on the foregoing, it is submitted that this rejection of claim 60 is in **error** and that claim 60 is patentably distinguished from the combination of Skinner, Paine, and Phelan. Accordingly, Appellants respectfully submit that claim 60 is currently in condition for allowance for at least these additional reasons.

CONCLUSION

For all of the reasons discussed above, it is respectfully submitted that the rejections are in error and that claims 1-21, 23-52 and 55-60 are in condition for allowance. For all of the above reasons, Appellants respectfully request this Honorable Board to reverse the rejections of claims 1-21, 23-52 and 55-60.

Respectfully submitted,

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APPENDICES

VIII. CLAIMS APPENDIX

Claims involved in the Appeal are as follows:

1. (Rejected) A server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the method including:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists;

b) selecting an initial plurality of candidate keywords;

c) expanding the initial plurality of candidate keywords selected in b) based at least in part on the at least one candidate advertisement selected in a) to form an expanded plurality of candidate keywords;

d) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from c);

e) estimating a click-through rate for each advertisement-keyword pair created in d);

f) calculating a return on advertising investment (ROAI) for each advertisement-keyword pair created in d) based at least in part on the corresponding click-through rate estimated in e);

g) calculating an optimized bid for each advertisement-keyword pair created in d) based at least in part on the corresponding ROAI calculated in f); and

h) automatically submitting the optimized bids for each advertisement-keyword pair calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c).

2. (Rejected) The method as set forth in claim 1 wherein at least two candidate advertisements are selected in a).

3. (Rejected) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is based at least in part on information provided by the advertiser.

4. (Rejected) The method as set forth in claim 1 wherein the expanded plurality of candidate keywords is automatically generated based at least in part from the initial plurality of candidate keywords which is based at least in part on information provided by the advertiser.

5. (Rejected) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from content in an advertiser web site.

6. (Rejected) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is

automatically generated based at least in part from content of the at least one candidate advertisement.

7. (Rejected) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from two or more of at least one candidate keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.

8. (Rejected) The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated by placing the corresponding candidate advertisement in a search results list on a trial basis.

9. (Rejected) The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated based at least in part on the relevance of content in the corresponding candidate advertisement to the one or more candidate keywords for the corresponding advertisement-keyword pair.

10. (Rejected) The method as set forth in claim 1 wherein the estimated click-through rate for each advertisement-keyword pair is periodically revised based on actual search queries, search results lists, and click-throughs corresponding to the advertisement-keyword pair.

11. (Rejected) The method as set forth in claim 1, the ROAI calculating in f) further including:

tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list;

tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list; and

associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

12. (Rejected) The method as set forth in claim 11 wherein tracking the advertisement-keyword pair is accomplished at least in part by using one or more of a tracking URL, a form, and a cookie.

13. (Rejected) The method as set forth in claim 11 wherein the revenue event includes at least one of a sale, a lead generation, and a form submission

14. (Rejected) The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount are stored in a database associated with the advertiser web site.

15. (Rejected) The method as set forth in claim 11 wherein an image bug is placed on the advertiser web site and the revenue event and corresponding revenue amount are stored in a service provider web site.

16. (Rejected) The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount is stored in a database associated with the advertiser web site.

17. (Rejected) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

receiving the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

18. (Rejected) The method as set forth in claim 17 wherein the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts are received by at least one of file transfer protocol (FTP) data transfer and web services.

19. (Rejected) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

considering the relevance of the advertiser web site to the advertisement-keyword combination.

20. (Rejected) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

considering an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the

advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

21. (Rejected) The method as set forth in claim 1 wherein the calculated ROAI for each advertisement-keyword pair is based at least in part on information received from the advertiser.

22. (Canceled)

23. (Rejected) The method as set forth in claim 1 wherein the optimized bids calculated in g) are optimized based at least in part on optimization of ROAI for at least one of the candidate advertisement and the one or more candidate keywords associated with the corresponding advertisement-keyword pair.

24. (Rejected) The method as set forth in claim 23, further including:

recommending an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

25. (Rejected) The method as set forth in claim 24 wherein the set of bid combinations is sorted by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

26. (Rejected) The method as set forth in claim 24 wherein the advertiser constrains the set of bid combinations by at least one of an advertisement budget and a capacity budget.

27. (Rejected) The method as set forth in claim 26 wherein the advertiser constraint is a maximum budget amount for a predetermined period of time.

28. (Rejected) The method as set forth in claim 26 wherein the advertiser constraint is a desired number of click-throughs for a predetermined period of time.

29. (Rejected) The method as set forth in claim 26 wherein the advertiser constraint is at least one of a multiplier of ROAI and a desired profit margin with respect to ROAI.

30. (Rejected) The method as set forth in claim 26 wherein the advertiser constraint is at least one of a maximum budget amount for a predetermined period of time, a desired number of click-throughs for a predetermined period of time, a multiplier of ROAI, and a desired profit margin with respect to ROAI.

31. (Rejected) A server-based apparatus for submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the apparatus including:

an advertisement selection system for selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists;

a keyword selection system in communication with the advertisement selection system for selecting an initial plurality of candidate keywords and for expanding the initial plurality of candidate keywords based at least in part on the at least one candidate advertisement selected by the advertisement selection system to form an expanded plurality of candidate keywords;

an advertisement-keyword selection system in communication with the advertisement selection system and keyword selection system for creating an advertisement-keyword pair for each candidate advertisement selected by the advertisement selection system and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from expansion of the initial plurality of candidate keywords by the keyword selection system, for estimating a click-through rate for each advertisement-keyword pair, and for calculating a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part on the corresponding estimated click-through rate; and

a bid determination system in communication with the advertisement-keyword selection system for calculating an optimized bid for each advertisement-keyword pair created by the advertisement-keyword selection system based at least in part on the corresponding ROAI calculated by the advertisement-keyword selection system and for automatically submitting the optimized bids for each advertisement-keyword pair to the competitive bidding process for placement of each candidate advertisement selected by the advertisement selection system in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of keywords

resulting from expansion of the initial plurality of candidate keywords by the keyword selection system.

32. (Rejected) The apparatus as set forth in claim 31 wherein the keyword selection system automatically generates at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords from one or more of at least one candidate keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.

33. (Rejected) The apparatus as set forth in claim 31, the advertisement-keyword selection system further including:

an ROAI agent for tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list, tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list, and associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

34. (Rejected) The apparatus as set forth in claim 33 wherein the ROAI agent also receives the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

35. (Rejected) The apparatus as set forth in claim 33 wherein the ROAI agent also considers the relevance of the advertiser web site to the advertisement-keyword combination.

36. (Rejected) The apparatus as set forth in claim 33 wherein the ROAI agent also considers an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

37. (Rejected) The apparatus as set forth in claim 31 wherein the optimized bids determined by the bid determination system are optimized based at least in part on optimization of ROAI for at least one of the candidate advertisement and the one or candidate keywords associated with the corresponding advertisement-keyword pair.

38. (Rejected) The apparatus as set forth in claim 37 wherein the bid determination system recommends an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

39. (Rejected) The apparatus as set forth in claim 38 wherein the bid determination system sorts the optimal set of bid combinations by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

40. (Rejected) A server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the method including:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in at least one publisher web page;

b) selecting a plurality of candidate publisher web pages, wherein each candidate publisher web page is associated with one or more candidate advertisement selected in a) and includes one or more auctioned advertisement positions;

c) creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b);

d) estimating a click-through rate for each advertisement-publisher web page pair created in c);

e) calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair created in c) based at least in part on the corresponding click-through rate estimated in d);

f) calculating an optimized bid for each advertisement-publisher web page pair created in c) based at least in part on the corresponding ROAI calculated in e); and

g) automatically submitting the optimized bids for each advertisement-publisher web page pair calculated in f) to the competitive bidding process for placement of each

candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b).

41. (Rejected) The method as set forth in claim 40, the ROAI calculating in e) further including:

tracking the advertisement-publisher web page pair at the time a user clicks on the corresponding advertisement in the corresponding publisher web page;

tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the corresponding publisher web page; and

associating the tracked advertisement-publisher web page pair clicks with the tracked revenue events and corresponding revenue amounts.

42. (Rejected) A server-based method of submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement, the method including:

a) selecting at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists;

b) selecting one or more keywords based at least in part on content of the at least one candidate advertisement selected in a) to optimize the keyword selecting and provide one or more optimized keywords;

c) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b), wherein each advertisement-keyword pair includes one or more optimized keywords;

d) calculating an optimized bid for each advertisement-keyword pair created in c) based at least in part on the one or more optimized keywords selected in b); and

e) automatically submitting the optimized bids for each advertisement-keyword pair calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords selected in b).

43. (Rejected) The method as set forth in claim 42 wherein the optimized bids calculated in d) are based at least in part on information from the advertiser.

44. (Rejected) The method as set forth in claim 42 wherein the at least one candidate advertisement selected in a) is based at least in part on information from the advertiser and matching content of each candidate advertisement to one or more candidate keywords, wherein the matching of content is at least partially automated.

45. (Rejected) The method as set forth in claim 42 wherein the one or more optimized keywords selected in b) are based at least in part on information from the advertiser; and wherein the one or more optimized keywords associated with each advertisement-keyword pair in c) are based at least in part on information from the advertiser.

46. (Rejected) The method as set forth in claim 42, further including:

collecting information from an advertiser web site associated with the advertisement, wherein the advertiser web site information includes at least web site visits and web site sales; and

determining a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part from the advertiser web site information, wherein the determined ROAI is considered in calculating the corresponding optimized bid in d).

47. (Rejected) The method as set forth in claim 42, further including:

receiving advertisement management information from an advertiser via an input device, wherein the advertisement management information is considered in calculating the optimized bids in d).

48. (Rejected) The method as set forth in claim 42, further including:

collecting information from a keyword search engine associated with the search results list, wherein the keyword search engine information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the keyword search engine information is considered in calculating the optimized bids in d).

49. (Rejected) The method as set forth in claim 42, further including:

collecting information from an advertising aggregator associated with the search results list, wherein the advertising aggregator information is associated with at least one of current bids for placement of advertisements and previous search queries, and

wherein the advertising aggregator information is considered in calculating the optimized bids in d).

50. (Rejected) The method as set forth in claim 42, further including:

collecting information from a bidding service provider associated with the search results list, wherein the bidding service provider information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the bidding service provider information is considered in calculating the optimized bids in d).

51. (Rejected) The method as set forth in claim 42, further including:

collecting information from an advertiser web site associated with the advertisement, wherein the advertiser web site information is considered in calculating the optimized bids in d).

52. (Rejected) The method as set forth in claim 42, further including:

collecting information from a competitor web site associated with a competitor in relation to the advertiser, wherein the competitor web site information is considered in calculating the optimized bids in d).

53-54. (Canceled)

55. (Rejected) The method as set forth in claim 1, wherein calculating the ROAI in f) is based at least in part on historical sales data from sales made on an advertiser's

website that are associated with at least one keyword of the expanded plurality of candidate keywords and a cost per click associated with the keyword in order to determine a value of the keyword.

56. (Rejected) The method as set forth in claim 1, wherein an advertiser that drops out of the competitive bidding process for a given advertisement-keyword pair is presented with alternative keywords, the method further comprising:

determining that the optimized bid associated with the given advertisement-keyword pair will not win in the competitive bidding process;

performing a search query to find alternative keywords similar to the one or more candidate keywords associated with the given advertisement-keyword pair;

repeating e) through h) for the given advertisement-keyword pair with one or more alternative keywords substituted for at least one candidate keyword associated with the given advertisement-keyword pair.

57. (Rejected) A server-based computer program for use with an apparatus for submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement, the computer program including:

a non-transitory computer-readable storage medium having the computer program embodied in the storage medium for causing the apparatus to perform the following:

i) selection of at least one candidate advertisement associated with the advertiser for subsequent placement in search results lists;

ii) selection of an initial plurality of candidate keywords;

iii) expansion of the initial plurality of candidate keywords selected in ii) based at least in part on the at least one candidate advertisement selected in i) to form an expanded plurality of candidate keywords;

iv) creation of an advertisement-keyword pair for each candidate advertisement selected in i) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from iii);

v) determination of an optimized bid for each advertisement-keyword pair created in iv); and

vi) automatic submission of the optimized bids for each advertisement-keyword pair determined in v) to the competitive bidding process for placement of each candidate advertisement selected in i) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from iii).

58. (Rejected) The method of claim 1, wherein the optimized bids calculated in g) are based at least in part on an aggressiveness setting which optimizes bidding strategy based on sales and visitor data, ROAI, current and historical bidding data.

59. (Rejected) The method of claim 1, further comprising:

performing a competition assessment in which a competition assessment agent collects and analyzes information from at least one competitor's website to select one or more competitor keywords, wherein at least one of the initial plurality of candidate

keywords and the expanded plurality of candidate keywords is based at least in part on the competitor keywords from the competition assessment.

60. (Rejected) The method of claim 59, further comprising:

calculating a competitor ROAI for each competitor keyword based at least in part on the competition assessment, wherein the optimized bids calculated in g) are based at least in part on competitor ROAIs for competitor keywords related to the one or more candidate keywords for advertisement-keyword pairs for corresponding optimized bids.

IX. EVIDENCE APPENDIX

NONE

X. RELATED PROCEEDINGS APPENDIX

NONE

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